



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/574,990	01/08/2007	Pasi S. Ojala	088245-0809	6883
23524 7590 03/24/2010 FOLEY & LARDNER LLP 150 EAST GILMAN STREET P.O. BOX 1497 MADISON, WI 53701-1497				
EXAMINER ABEBE, DANIEL DEMELASH				
ART UNIT		PAPER NUMBER		
2626				
MAIL DATE		DELIVERY MODE		
03/24/2010		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/574,990

Applicant(s)

OJALA, PASI S.

Examiner

Daniel D. Abebe

Art Unit

2626

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 April 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 12-15 and 26-28 is/are allowed.
- 6) ☒ Claim(s) 1, 2, 5-11, 16-25 and 29-32 is/are rejected.
- 7) ☒ Claim(s) 3 and 4 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB06)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Paper No(s)/Mail Date _____
- 6) ☐ Other: _____

DETAILED ACTION

Information Disclosure Statement

The information disclosure statements filed on 10/2/08 and 8/12/08 fail to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each cited foreign patent document; each non-patent literature publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed. It has been placed in the application file, but the information referred to therein has not been considered.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 29 and 31 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

The claimed computer program is directed to functional descriptive material that is unpatentable under 35 USC 101.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

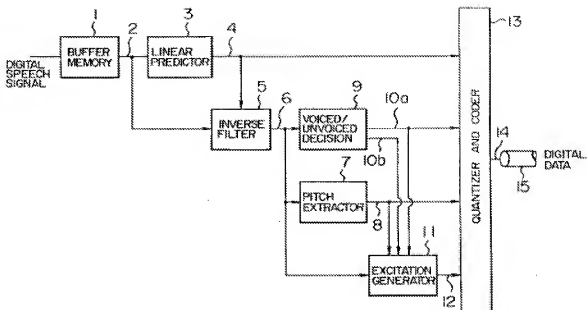
(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-2, 5-11, 16-25, 30 and 32 are rejected under 35 U.S.C. 102(b) as being anticipated by Asakawa et al. (5,119,424).

As to claim 1, Asakawa teaches a speech coding method enabling a subsequent reconstruction the speech data with a synthesis filter and an excitation signal comprising the steps of:

dividing the source data signal into consecutive blocks/frames,
extracting a first set of spectral parameters related to said filter describing properties of a first block covering a first time period (Col.3, lines 46-55), and
extracting a second set of parameters related to said excitation signal for said filter, where said second set of parameters is determined from and describing properties of both the first block and a second block following the first block within a second time period starting later than said first time period and extending outside said first time period (Col.5, lines 6-22; Col.6, lines 10-18, lines 56-67; Figs.1-5).

FIG. 1a



As to claim 2, Asakawa teaches the step of buffering at least the part of said second set of parameters or an indication thereof which corresponds to said second block in order to use said stored parameters for extracting at least one parameter of said second block following said first block (Figs.1-5).

As to claim 5, Asakawa teaches wherein said first set of parameters substantially indicates a number of LPC (Linear Predictive Coding) parameters (Fig.1a; Col.3, lines 46-52).

As to claim 6, it is inherent in Asakawa teaching that the excitation is extracted from the conventional excitation codebook comprising vectors.

As to claim 7, it is shown in Asakawa where the periods for the first and the second frames vary.

As to claims 8-9, Asakawa teaches using the ABS technique for extracting the excitation signal where the filter includes LPC and LTP filters (Fig.1a).

As to claims 10-11, Asakawa teaches where the signal is speech signal and where the filter coefficients are utilized to obtain the excitation parameters (Fig.1a).

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 16-25 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 16-25 rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential elements, such omission amounting to a gap between the elements. See MPEP § 2172.01. The omitted elements are: the excitation parameters being extracted covering two consecutive blocks.

Claim 20 recites the limitation "said excitation signal" in line 2. There is insufficient antecedent basis for this limitation in the claim.

With regard to claims 30 and 32, the corresponding carrier medium for carrying the program to perform the steps recited in the method claim is analogous and therefore rejected as being anticipated by Asakawa et al. for the foregoing reasons.

Allowable Subject Matter

Claims 12-15 and 26-28 are allowed.

The following is a statement of reasons for the indication of allowable subject matter: the claims are allowed because Asakawa doesn't teach the decoding process and device including combining the contribution of said previous second set of parameters and said second set of parameters for said excitation signal within said first time period, constructing an excitation signal of said first block for said synthesis filter by utilizing said combination, and filtering said constructed excitation signal through said synthesis filter.

.Claims 3-4 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: the claims are allowable because Asakawa doesn't teach the step including extracting at least one parameter related to said excitation signal on the basis of said second set of parameters relating to said first and second blocks, and of previously extracted and at least partially stored second set of parameters relating to a block preceding said first block and said first block.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel D. Abebe whose telephone number is 571-272-7615. The examiner can normally be reached on monday-friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Hudspeth can be reached on 571-272-7843. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Daniel D Abebe/
Primary Examiner, Art Unit 2626